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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/920,627	08/03/2001	Arthur E. Colvin JR.	2232-146	8027

6449 7590 05/06/2003

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WASHINGTON, DC 20005

EXAMINER
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COLE, MONIQUE T

ART UNIT	PAPER NUMBER
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1743

DATE MAILED: 05/06/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/920,627

Applicant(s)

COLVIN, ARTHUR E.

Examiner

Monique T. Cole

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 February 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-59 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6, 7, 10, 11, 12, 14-17, 19, 20, 23-25, 27-30, 32, 33, 36-38, 40-44, 46-51, 53, 54, 55, 56, 58 is/are rejected.
- 7) ☒ Claim(s) 5, 8, 9, 13, 18, 21, 22, 26, 31, 34, 35, 39, 45, 52 and 57 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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## DETAILED ACTION

The prior rejection of the claims by the Colvin reference has been withdrawn in view of Applicant's remarks

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 1-4, 6, 7, 10, 11, 12, 14-17, 19, 20, 23-25, 27-30, 32, 33, 36-38, 40-44, 46-51, 53, 54, 55, 56, 58 rejected under 35 U.S.C. 102(e) as being anticipated by USP 6,002,954 to Van Antwerp et al. (herein referred to as "Van Antwerp '954").

Van Antwerp '954 disclose a method for the determination of the concentration of glucose which comprises immobilizing an anthracene derivative, such as 9-((N-Methyl-N-(o-boronobenzyl)amino)methyl) anthracene, within a hydrophilic polymer (one or more hydrophilic monomers) matrix (col. 12, lines 22-23). See abstract; col. 11, lines 35-41; col. 12, lines 22-24; col. 18, lines 9-10. Anthracene compounds inherently possess excimer-forming capabilities. See specification page 15, lines 15-16. The method is capable of being used in an aqueous environment, such as that found in the blood (col. 4, lines 50-53).

*Response to Arguments*

2. Applicant's arguments filed 2/3/2003 have been fully considered but they are not persuasive.

3. Applicant has argued that Van Antwerp '954 does not disclose or suggest any copolymers. However, it is the Examiner's position that the indicator molecule can be bound to the hydrophilic polymer in a manner sufficient to fulfill the requirements of the instant claims wherein the ratio of copolymerization is broad (2:1 to 1000:1).

4. Furthermore, with regard to Applicant's arguments directed to the lack of disclosure of an excimer effect, the instant specification recognizes the ability of anthracene molecules to possess excimer effect. Thus, it is not clear how the compounds taught by Van Antwerp can be deficient of this property when it also discloses anthracene compounds.

*Allowable Subject Matter*

5. Claims 5, 8, 9, 13, 18, 21, 22, 26, 31, 34, 35, 39, 45, 52 & 57 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. The following is a statement of reasons for the indication of allowable subject matter: the prior art does not teach or suggest using (3-(methacryloylamino)-propyl)trimethylammonium chloride as the hydrophilic monomer in an indicator macromolecule for the detection of analytes in aqueous environments. The prior art does not teach or suggest a molar ratio of hydrophilic monomer to indicator component monomer from about 5:1 to about 50:1.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Monique T. Cole whose telephone number is 703-305-0447. The examiner can normally be reached on Monday-Thursday from 6:30 A.M. to 4:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on 703-308-4037. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-5408 for regular communications and 703-305-3599 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-0661.

Monique T. Cole  
Examiner  
Art Unit 1743

MC *Mc*  
May 5, 2003

*Jill Warden*  
Jill Warden  
Supervisory Patent Examiner  
Technology Center 1700